

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-21 (canceled)

Claim 22 (currently amended): A recombinant construct comprising a polynucleotide encoding an AT hook transcription factor polypeptide, wherein the polynucleotide hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 or the complement thereof under stringent conditions;

wherein said stringent conditions comprise 6X SSC at 65°C and two wash steps of 10 to 30 minutes with about 0.2x SSC, 0.1% SDS at 65°C or greater stringency; ~~and~~

wherein the AT hook transcription factor polypeptide has at least 50% amino acid identity to SEQ ID NO: 14, and comprises a conserved domain that is at least 65% identical to amino acids 106-201 of SEQ ID NO: 14; ~~and~~

wherein when the AT hook transcription factor polypeptide is over-expressed in a transgenic plant, the AT hook transcription factor polypeptide confers to the transgenic plant greater drought tolerance or greater biomass relative to a control plant.

Claims 23-24 (canceled)

Claim 25 (previously presented): The recombinant construct of claim 22, wherein the transcription factor polypeptide is at least 90% identical to SEQ ID NO: 14.

Claim 26 (previously presented): The recombinant construct of claim 22, wherein the recombinant construct is comprised within a host plant cell.

Claim 27 (currently amended): A transgenic plant comprising a recombinant polynucleotide encoding an AT-hook transcription factor polypeptide;

wherein the recombinant polynucleotide hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 or the complement thereof under stringent conditions;

wherein said stringent conditions comprise 6X SSC at 65°C and two wash steps of 10 to 30 minutes with about 0.2x SSC, 0.1% SDS at 65°C or greater stringency;

wherein the AT hook transcription factor polypeptide has at least 50% amino acid identity to SEQ ID NO: 14, and comprises a conserved domain that is at least 65% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14;

wherein when the AT hook transcription factor polypeptide is over-expressed in a transgenic plant, the AT hook transcription factor polypeptide confers to the transgenic plant greater drought tolerance or greater biomass relative to a control plant.

Claims 28-29 (canceled)

Claim 30 (previously presented): The transgenic plant of claim 27, wherein the transcription factor polypeptide is at least 90% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 31 (previously presented): The transgenic plant of Claim 27, wherein expression of the AT-hook transcription factor polypeptide is regulated by a constitutive, inducible, or tissue-specific promoter.

Claim 32 (currently amended): A method for producing a transgenic plant having increased biomass as compared to a control plant, the method steps comprising:

(a) providing a recombinant construct comprising:

(i) a polynucleotide that hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 or the complement thereof under stringent conditions;

wherein said stringent conditions comprise 6X SSC at 65°C and two wash steps of 10 to 30 minutes with about 0.2x SSC, 0.1% SDS at 65°C or greater stringency;

wherein the polynucleotide encodes an AT-hook transcription factor polypeptide that has at least 50% amino acid identity to SEQ ID NO: 14, and comprises a conserved domain that is at least 65% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14; and

(ii) one or more regulatory elements that control expression of the AT-hook transcription factor polypeptide;

(b) introducing the recombinant construct into a plant cell; and

(c) growing the plant cell into the transgenic plant, wherein the transgenic plant overexpresses the AT-hook transcription factor polypeptide and as a result of said overexpression has increased biomass as compared to the control plant.

Claim 33 (previously presented): The method of Claim 32, the method steps further comprising:

(d) selfing or crossing said transgenic plant with increased biomass with itself or another plant, respectively, to produce transgenic seed; and

(c) growing a progeny plant from the transgenic seed, thus producing a transgenic progeny plant having increased biomass as compared to the control plant.

Claims 34-35 (canceled)

Claim 36 (previously presented): The method of claim 32, wherein the transcription factor polypeptide is at least 90% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 37 (currently amended): A method for producing a transgenic plant having more tolerance to drought conditions than a control plant, the method steps comprising:

(a) providing a recombinant construct comprising:

(i) a polynucleotide that hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 or the complement thereof under stringent conditions;

wherein said stringent conditions comprise 6X SSC at 65°C and two wash steps of 10 to 30 minutes with about 0.2x SSC, 0.1% SDS at 65°C or greater stringency

wherein the polynucleotide encodes an AT-hook transcription factor polypeptide that has at least 50% amino acid identity to SEQ ID NO: 14, and comprises a conserved domain that is at least 65% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14; and

(ii) one or more regulatory elements that control expression of the AT-hook transcription factor polypeptide;

(b) introducing the recombinant construct into a plant cell; and

(c) growing the plant cell into the transgenic plant, wherein the transgenic plant overexpresses the AT-hook transcription factor polypeptide and as a result of said overexpression has more tolerance to drought conditions as compared to the control plant.

Claim 38 (previously presented): The method of Claim 37, the method steps further comprising:

(d) selfing or crossing said transgenic plant with more tolerance to drought conditions with itself or another plant, respectively, to produce transgenic seed; and

(e) growing a progeny plant from the transgenic seed, thus producing a transgenic progeny plant having more tolerance drought conditions as compared to the control plant.

Claims 39-40 (canceled)

Claim 41 (previously presented): The method of claim 37, wherein the transcription factor polypeptide is at least 90% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 42 (previously presented): A transgenic seed comprising the recombinant construct of claim 22.

Claim 43 (previously presented): A recombinant construct comprising a polynucleotide encoding an AT hook transcription factor polypeptide, wherein the polynucleotide comprises SEQ ID NO: 13.

Claim 44 (previously presented): The recombinant construct of claim 43, wherein the recombinant construct is comprised within a host plant cell.

Claim 45 (currently amended): The recombinant construct of claim 22, wherein the transcription factor polypeptide is at least ~~60%~~ 85% identical to SEQ ID NO: 14.

Claim 46 (currently amended): The transgenic plant of claim 27, wherein the transcription factor polypeptide is at least ~~60%~~ 85% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 47 (currently amended): The method of claim 32, wherein the transcription factor polypeptide is at least ~~60%~~ 85% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 48 (currently amended): The method of claim 37, wherein the transcription factor polypeptide is at least ~~60%~~ 85% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 49 (new): A method for producing a transgenic plant having increased biomass or more tolerance to drought conditions as compared to a control plant, the method steps comprising:

- (a) introducing the recombinant construct of claim 43 into a plant cell; and
- (b) growing the plant cell into the transgenic plant, wherein the transgenic plant overexpresses the AT-hook transcription factor polypeptide and has increased biomass as compared to a control plant.

Claim 50 (new): The transgenic plant of claim 27, wherein the transcription factor polypeptide is at least 95% identical in its amino acid sequence to SEQ ID NO: 14.

Claim 51 (new): A transgenic plant transformed with the recombinant construct of claim 43.